

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

[] Supplemental (37 C.F.R. §1.67)

As a named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 2 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Method and Apparatus for Detecting and Measuring State of Fullness in Cryopumps

the specification of which (check one)

- [] is attached hereto.
- [X] was filed on January 21, 2004 as United States Application Number 10/763,056.
- [] was filed on [PCT Filing Date] as PCT International Application No. [PCT Appl'n No.] [OPTION and assigned United States Application No. []].
- [] and was amended on [] (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119 or 365 of any foreign application(s) for patent or inventor's certificate, or of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>	Priority Not Claimed	Certified Copy Filed? YES	NO
(Number)	(Country)	(Day/Month/Year filed)	[] [] []
(Number)	(Country)	(Day/Month/Year filed)	[] [] []
(Number)	(Country)	(Day/Month/Year filed)	[] [] []

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole

or first inventor Gary S. Ash

Inventor's Signature Gary S. Ash

Date April 13, 2004

Residence 1205 Reed Road

Dartmouth, MA 02747

Citizenship USA

Mailing Address Same as above

Full name of second joint

inventor, if any Allen J. Bartlett

Inventor's Signature Allen J. Bartlett

Date 3/31/04

Residence 52 Pleasant Street One Stalbrook Road
Mendon, MA 01756 Milford, MA 01757

AB
3/31/04

Citizenship USA

Mailing Address Same as above

Full name of third joint

inventor, if any James A. O'Neil

Inventor's Signature James A. O'Neil

Date 4/9/04

Residence 21 Clark Road

Bedford, MA 01730

Citizenship USA

Mailing Address Same as above

Full name of fourth joint

inventor, if any Bruce R. Andeen

Inventor's Signature Bruce R. Andeen

Date 4/5/04

Residence 67 Woodward Lane

Boxborough, MA 01719

Citizenship USA

Mailing Address Same as above

COPY Joint

ASSIGNMENT

WHEREAS, we, **Gary S. Ash, Allen J. Bartlett, James A. O'Neil, and Bruce R. Andeen**, have invented a certain improvement in **Method and Apparatus for Detecting and Measuring State of Fullness in Cryopumps** described in an application for Patent,

- [] the specification of which is being executed on even date herewith and is about to be filed in the United States Patent Office (*use for 37 CFR §1.53(b) filings only*);
- [] is about to be filed in the United States Patent Office as a Provisional Application;
- [X] the specification of which is United States Application No. **10/763,056**, filed **January 21, 2004**;
- [] the specification of which is a Patent Cooperation Treaty Application, International Application No. [], which designates the United States of America;
- [] which was patented under United States Patent No. [].

WHEREAS, **Helix Technology Corporation** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **State of Delaware**, and having a usual place of business at **Mansfield Corporate Center, Nine Hampshire Street, Mansfield, Massachusetts 02048-9171** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

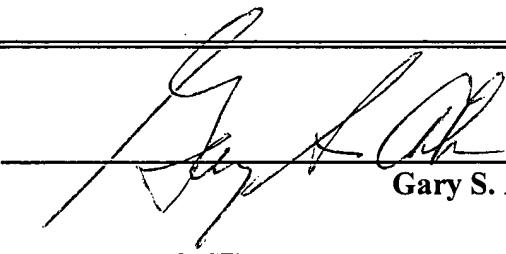
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts

which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature:


Gary S. Ash

State/Commonwealth

of Massachusetts

County of Bristol

Then personally appeared before me the above-named Gary S. Ash and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 13th day of April, 20 07

(SEAL)


Sandra J. LeBlanc Notary Public

(print name)
My Commission expires 7/25/08

Inventor's Signature:



Allen J. Bartlett

State/Commonwealth

of Massachusetts

County of Bristol

Then personally appeared before me the above-named **Allen J. Bartlett** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 31st day of March, 2004.

(SEAL)

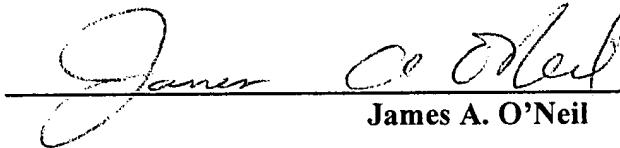


Notary Public

Deborah M. Wilkins (print name)

My Commission expires 5/18/2008

Inventor's Signature:



James A. O'Neil

State/Commonwealth

of Middlesex

County of MA

Then personally appeared before me the above-named **James A. O'Neil** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 24th day of April, 2004.

(SEAL)



Notary Public

Colleen M. Jones (print name)

My Commission expires 1/1/

COLLEEN M. JONES
NOTARY PUBLIC
My commission expires Jan. 9, 2009

Inventor's Signature:

BR Andeen

Bruce R. Andeen

State/Commonwealth

of Massachusetts

County of Bristol

Then personally appeared before me the above-named **Bruce R. Andeen** and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 5th day of April, 2004.

(SEAL)

Rebecca E Pearson Notary Public
Rebecca E Pearson (print name)
My Commission expires 01/16/2009

REBECCA E. PEARSON
Notary Public
Commonwealth of Massachusetts
My Commission Expires
January 16, 2009